

Utah Transportation Interim Committee

State Activity Addressing Autonomous Vehicle Technology

National Conference of State

September 20th, 2017
Legislatures



NATIONAL CONFERENCE *of* STATE LEGISLATURES

National Conference of State Legislatures



- Non-profit, bi-partisan organization.
- Members are all 50 state legislatures, 7,383 legislators and 30,000 legislative staff in 50 states, D.C. and U.S. territories.
- Offices in Denver and D.C.
- Among our goals - To provide legislatures with information and research about policy issues, both state and federal.
- NCSL tracks state policy developments in all public policy areas.



States with Enacted Autonomous Vehicle Legislation

Legend:

- Enacted (Blue)
- Executive Order (Green)

States with Enacted Legislation (Blue):

- CA, NV, UT, CO, TX, AR, LA, TN, SC, GA, FL, NC, VA, PA, NY, MI, IL, IN, OH, WV, KY, MO, IA, MN, ND, SD, NE, KS, OK, NM, AZ, WI, WA, OR, MT, WY, ID, ME, NH, VT, CT, RI, NJ, DE, MD, DC

States with Executive Order Legislation (Green):

- MA, AZ, WA, WI

States without Legislation (Gray):

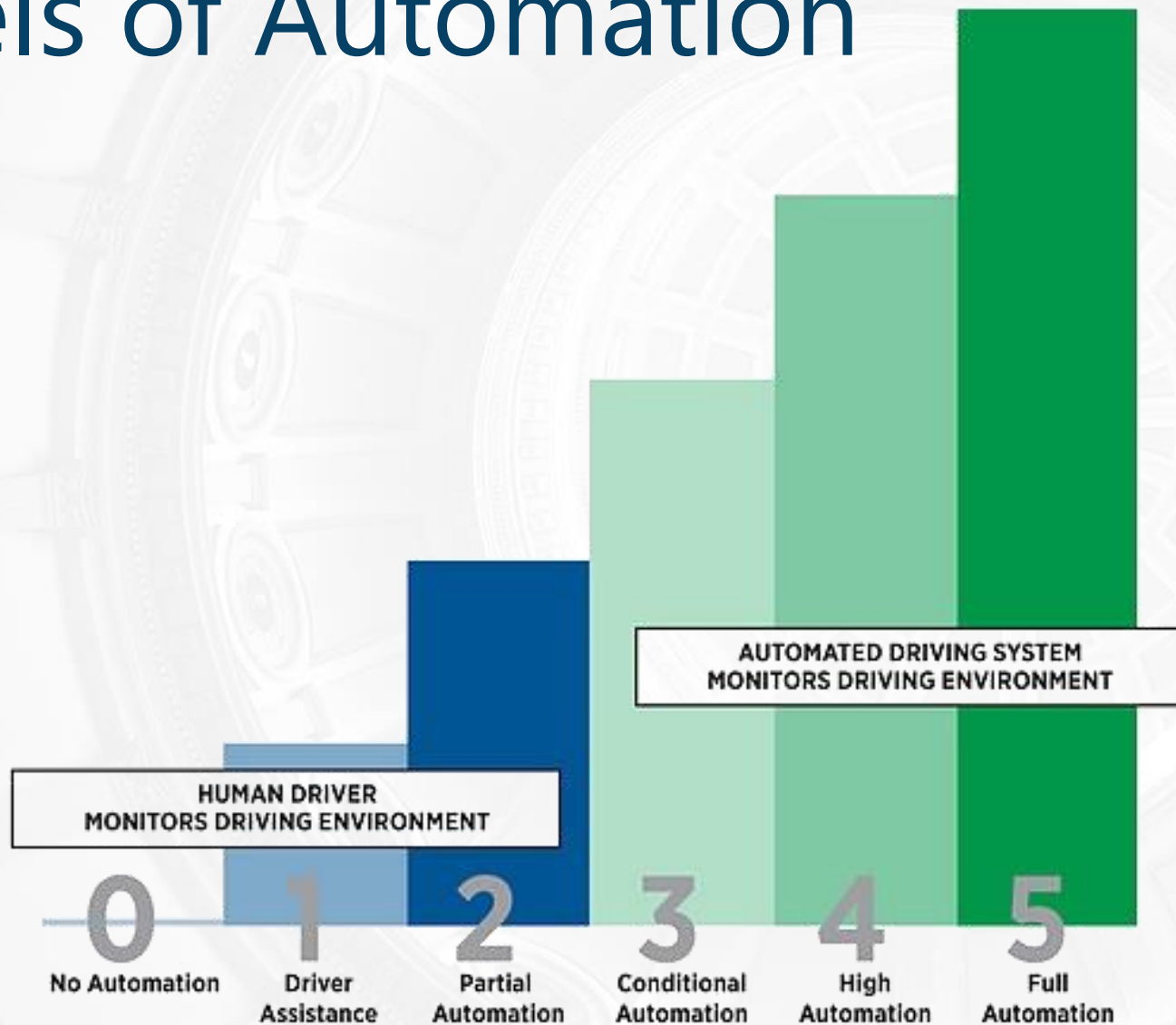
- AK, HI, AS, GU, MP, VI, PR

Columbus, OH
won “Smart
Cities
Challenge”



VA Governor: 70 miles of interstates and arterial roads dubbed “Virginia Automated Corridors”

Levels of Automation



State Laws: Nevada



- ❑ First state to authorize the testing/operation of autonomous vehicles in 2011.
- ❑ Nevada Center for Advanced Mobility established in 2016.
- ❑ October 2016: 1st Autonomous Vehicle Restricted License issued.
- ❑ Otto violates Nevada Law
- ❑ 2017 Legislation



State Laws: California



- ❑ Passed Legislation in 2012
- ❑ 2015 draft regulations and back
- ❑ Enacted AB 1592
- ❑ September 2016: Revised draft of regulations.
- ❑ March 2017: Proposed Driverless Testing and Deployment Regulations



State Laws: Michigan



- Michigan passed 4 bill package in 2016:
 - ▣ Eases testing restrictions
 - ▣ Allows autonomous vehicles to be driven on roads in the state when they are sold to the public.
 - ▣ Allows for truck platooning
 - ▣ Created American Center for Mobility



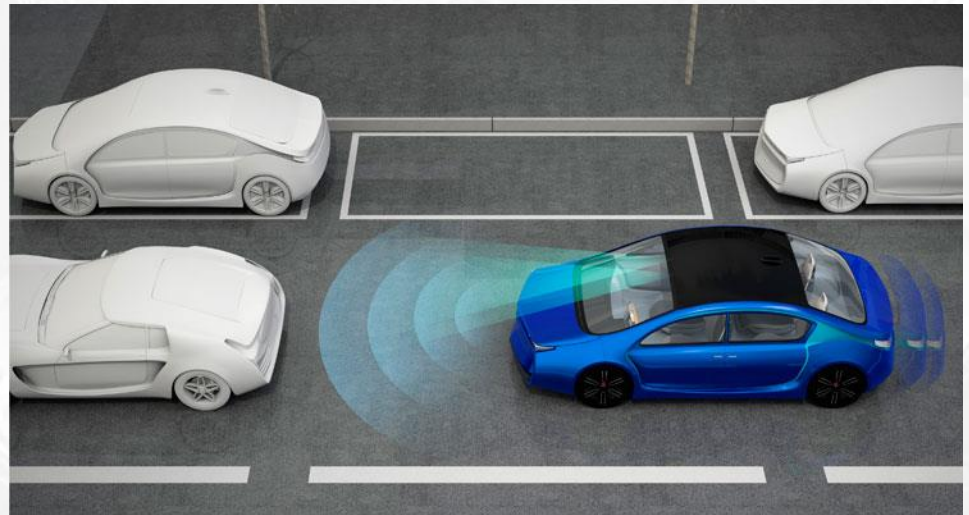
Testing

- At least 8 states and Washington DC have enacted legislation regarding testing
 - ▣ California, Colorado, Connecticut, Florida, Michigan, New York, Utah



Definitions

- ❑ Defining significant terms
 - ▣ Autonomous vehicle
 - ▣ Automated driving system
 - ▣ Operator



Insurance

- \$5,000,000 typical for testing
 - ▣ California, Florida, Nevada, New York
- \$10,000,000 required in Michigan
- States also addressing liability for “upfitting” AVs



Commercial Use

- ❑ Implications for freight transportation
- ❑ Following-too-closely laws
 - AR, FL, GA, MI, NV, SC, TN, TX



Image from <http://www.truckinginfo.com/channel/fuel-smarts/article/story/2016/04/platooning-is-on-the-way.aspx>



NATIONAL CONFERENCE *of* STATE LEGISLATURES

Studying the Technology

- Work groups or task forces
 - ▣ In all four executive orders
 - ▣ Alabama
 - ▣ North Dakota
 - ▣ Utah
 - ▣ Vermont



Executive Orders



- Arizona: August 2015
 - Directed agencies to support testing and operation of HAV's
 - Created "The Self-Driving Vehicles Oversight Committee"

- Massachusetts: October 2016
 - Established "The AV Working Group"



Executive Orders



- Washington: June 2017
 - Established an autonomous vehicle work group
 - Requires that state agencies “support the safe testing and operation of autonomous vehicles on Washington’s public roads.”
- Wisconsin: May 2017
 - Created the Governor’s Steering Committee on Autonomous and Connected Vehicle Testing and Deployment



State Legislative Action: 2017 and Beyond

- 33 states considered legislation in 2017
- 99 bills
- 41 states since 2012
- NCSL

TOPICS [Clear](#)

- ☒ All Topics
- ☒ Commercial
- ☒ Cybersecurity of Vehicle
- ☒ Definitions
- ☒ Infrastructure and Connected Vehicles
- ☒ Insurance and Liability
- ☒ Licensing and Registration
- ☒ Operation on Public Roads
- ☒ Operator Requirements
- ☒ Other
- ☒ Privacy of Collected Vehicle Data

STATES [Clear](#)

- ☒ Illinois
- ☒ Indiana
- ☒ Iowa
- ☒ Kansas
- ☒ Kentucky
- ☒ Louisiana
- ☒ Maine
- ☒ Maryland
- ☒ Massachusetts
- ☒ Michigan
- ☒ Minnesota

KEYWORD

STATUS

BILL NUMBER

YEAR

AUTHOR

[Search](#) [Reset All](#)

Powered by
LexisNexis® State Net®
[LexisNexis General Terms and Conditions](#)

This search is based on the following filters:
Topics: All Topics
States: All States
Year: 2017

[Show All History](#) [Hide All History](#) [Print Results](#)

RESULTS Total States: 33 Total Bills: 96

Automated Driving Systems (ADS): A Vision for Safety 2.0



- Released in September 2017
- 2nd edition, update to 2016 Policy



Federal Automated Vehicle Policy (FAVP)

-Federal Roles-

Vehicle Safety

- Federal Motor Vehicle Safety Standards (FMVSS)
- Vehicle Recalls
- Regulating Vehicle Performance



ADS: A Vision for Safety 2.0

12 Priority Safety Design Elements

- ❑ System Safety
- ❑ Operational Design Domain
- ❑ Object and Event Detection and Response
- ❑ Fallback (Minimal Risk Condition)
- ❑ Validation Methods
- ❑ Human Machine Interface
- ❑ Vehicle Cybersecurity
- ❑ Crashworthiness
- ❑ Post-Crash ADS Behavior
- ❑ Data Recording
- ❑ Consumer Education and Training

Interface



NATIONAL CONFERENCE OF STATE LEGISLATURES

❑ Federal, State,

Federal Automated Vehicle Policy (FAVP)

-State Roles-

Vehicle Use

- ❑ Driver Education and Training
- ❑ Traffic Laws and Regulations
- ❑ Vehicle Registration and Driver Licensing
- ❑ Insurance and Liability
- ❑ Law Enforcement/Emergency Response
- ❑ Safety Inspections



ADS: A Vision for Safety 2.0

Best Practices for Legislatures

- ❑ Provide a “technology-neutral” environment
- ❑ Provide licensing and registration procedures
- ❑ Provide reporting and communications methods for Public Safety Officials
- ❑ Review traffic laws and regulations that may serve as barriers to



Federal Legislative Act



- ❑ SELF Drive Act (HR 3388)
- ❑ Four main sections
 - ▣ Expansion of federal preemption
 - ▣ Updates to FMVSS
 - ▣ Exemptions from FMVSS
 - ▣ Federal Automated Vehicles Advisory Council
- ❑ Senate expected to introduce different legislation



Preemption

- ❑ Roles for federal, state, and local governments
- ❑ Federal regulation and legislation
- ❑ State regulation and legislation
- ❑ Local regulation



NCSL Activities



Pre-Conference on Autonomous Vehicles



NATIONAL CONFERENCE *of* STATE LEGISLATURES

Questions?

Amanda.Essex@ncsl.org

[NCSL's AV webpage](#)

